Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rele	ease Notific	catio	on and Co	orrecti	ive A	ction	1			
						<b>OPERA</b>	ΓOR			🛛 Initia	al Report		Final Report
		qaladin Ener				Contact Mickey Horn							
		oe Dr., Dall		75229	<b>-</b>	Telephone No. 432-634-6599							
Facility Nar	ne Lowe	25 SWD #2	Well			Facility Typ	e SWD	Well at	nd Batt	ery			
Surface Ow	ner Lov	ve Family		Mineral C	)wner	Lowe Far	nily			API No	. 30-025-	40668	
				LOCA	TIC	N OF RE	LEASE	]					
Unit Letter	Section	Township	Range	Feet from the	Nort	h/South Line	Feet fro	m the	East/\	West Line	County		
М	25	13 S	37 E	1087	Sout	h	216		Wes	t	Lea		
			La	titude		Longitud	le						
					URI	E OF REL							
		roduced Wat	er			Volume of					Recovered	-	arrels
Source of Re	lease					Date and H 1/3/2014	lour of Oc	currenc	e	Date and 8:00 AM	Hour of Di	scovery	y 1/3/2014
Was Immedia	ate Notice (		Yes [	] No 🔲 Not R	equire	If YES, To	Whom?	Geoffre	y Lekir				
		rn (operations	Manager	)		Date and H							
Was a Water	course Read		Yes 🗵	No		If YES, Volume Impacting the Watercourse.							
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	k									
Deceribe Cou	use of Brohl	em and Reme	dial Actio	n Takan *									
				vessel malfunctions in the second sec									
Describe Are	a Affected	and Cleanup A	Action Tal	ken.* (See final	Repor	t)				<del></del>			
I hereby certi	fy that the i	nformation gi	ven above	e is true and comp	lete to	the best of my	knowledg	ge and u	ndersta	nd that purs	uant to NM	IOCD	rules and
regulations a	ll operators	are required to	o report ar	nd/or file certain r	elease	notifications a	nd perform	n correc	tive act	ions for rele	eases which	i may e	ndanger
should their of	or the envir operations h	ronment. The	acceptant	ce of a C-141 report investigate and r	ort by t emedi	he NMOCD mate contaminati	arked as "	Final Ro	eport" c	loes not reli	eve the ope	rator o	of liability
				stance of a C-141									
federal, state,	or local lay	ws and/or regu	lations.								_		
	$\sim$ ,	lel					<u>OIL</u>	CONS	SERV	ATION	DIVISI	<u>NC</u>	
Signature:	2	after	any	•									
Printed Name	e: David Pl	aisance				Approved by	Environn	nental Sp	pecialis	t:			
Title: Operat	tions Manag	ger				Approval Da	le:			Expiration	Date:		
E-mail Addre	ess: dplaisa	nce@paladine	energy.cor	n		Conditions of	f Approva	l:			Attached		
Date: 7/29/	2014		Phone	: 214-654-0132									

\* Attach Additional Sheets If Necessary

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	cis Dr., Santa	Fe, NM 87505	5	Sa	inta F	e, NM 875	05						
	Release Notification and Corrective Action												
						<b>OPERA</b>	TOR	🔲 Ini	tial Report	$\boxtimes$	Final Report		
Name of Co	ompany Po	aladin Ener	gy Corp.			Contact Mi	ckey Horn						
		oe Dr., Dall					No. 432-634-65						
Facility Nat	me Lowe 2	25 SWD #2	Well			Facility Typ	e SWD Well ar	nd Battery					
Surface Ow	mer Low	e Family		Mineral C	wner	Lowe Far	nilv		lo. 30-025-	40668			
Currate on				<b>I</b>		N OF RE	•		0. 00 020				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line	County				
м	25	13 S	37 E	1087	South	1	216	West	Lea				
	1.20		<b></b>	titude		Longitud							
			1.4					<u></u>					
Tomo of Dala		d water & ei	1	INA I	UKE	COF REL	Release 70 Bar	nolo Volum	Recovered		amala		
Source of Re		ed water & oi	1				Iour of Occurrence		d Hour of Di		arrels $\frac{1/3}{2014}$		
Source of Re						1/3/2014		8:00 A			115/2014		
Was Immedi	ate Notice C		Yes [	] No 🔲 Not R	equired		Whom? Geoffre	y Leking					
By Whom?	Mickey Ho	rn (operations					lour 8:00 AM, 1	/3/2014		<u> </u>			
Was a Water		hed?		_			olume Impacting t				······		
			Yes 🛛	No									
Describe Cause of Problem and Remedial Action Taken.* Back pressure valve on free water knock-out vessel malfunctioned. Pop-off vented to water tank causing tank to run over. Rele water and some oil into enclosed area and immediately outside of containment dikes. Shut-in operations and contained venting.													
immediate c Describe Are Dug down o samples test	lean up. a Affected a n north and ed by Card	and Cleanup A I south sides inal Laborat	Action Tal of water to ories (atta	ken.* tank area an avei	rage of	2 feet to unco approval to	ontaminated soil. back fill entire ex	Installed 20 m	il poly liner	in area	. Had soil		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human here or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.									ndanger f liability uman health				
Signature:	Dail	Plan	·bom	ন্থ				<u>SERVATIO</u>	<u>N DIVISI</u>	<u>ON</u>			
Printed Nam	e: David Pl	aisance				Approved by	Environmental Sp	pecialist:					
Title: V.P.						Approval Da	te:	Expiratio	n Date:				
		nce@palading				Conditions of	f Approval:		Attache	d 🔲			
Date: 7/29/	2014		Phone	: 214-654-0132									

\* Attach Additional Sheets If Necessary





May 27, 2014

MICKEY HORN PALADIN 4006 DUNKIRK MIDLAND, TX 79707

RE: LOWE 25 SWD & LOWE #1

Enclosed are the results of analyses for samples received by the laboratory on 05/19/14 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	05/19/2014	Sampling Date:	05/14/2014
Reported:	05/27/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: NORTH SIDE BATTERY (H401522-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/22/2014	ND	2.26	113	2.00	2.72	
Toluene*	<0.050	0.050	05/22/2014	ND	2.21	111	2.00	2.27	
Ethylbenzene*	<0.050	0.050	05/22/2014	ND	2.14	107	2.00	2.39	
Total Xylenes*	<0.150	0.150	05/22/2014	ND	6.72	112	6.00	2.43	
Total BTEX	<0.300	0.300	05/22/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	<i>99.2</i> 9	89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/23/2014	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/23/2014	ND	202	101	200	0.794	
DRO >C10-C28	<10.0	10.0	05/23/2014	ND	224	112	200	0.343	
Surrogate: 1-Chlorooctane	97.3 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	89.6 9	63.6-15	4						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

RPD Relative Percent Difference   *** Samples not received at proper temperature of 6°C or below.   *** Insufficient time to reach temperature.   - Chloride by SM4500CI-B does not require samples be received at or below 6°C	ND	Analyte NOT DETECTED at or above the reporting limit
*** Insufficient time to reach temperature.	RPD	Relative Percent Difference
AND SALE AND	**	Samples not received at proper temperature of 6°C or below.
- Chloride by SM4500CI-B does not require samples be received at or below 6°C	***	Insufficient time to reach temperature.
	-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report		Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

### \*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1	01 East Marland, Hobbs, NM 8824 575) 393-2326 FAX (575) 393-2476	40 ;																	VOID	0.05/		T	 	
Company Name:										BI	L	LTO						ANAL	YSIS	REC	JUES		 	
	Mickey Horn								). #:		<u> </u>													
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m - 90	and State: TK	Zip	:					Att	n: N	1:1	J	ay H	TOKA											
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	Project Owner	0	ho	~~	i			City	v: 1	2	. 1	Slow		1			<u>\</u>							
Project #:	LOWE 25 SWOHI								te:								1							
									one #					1				١.						
Project Location	:							Fax						1				14						
Sampler Name:			Г	-	M	ATRI		_	PRES	SERV	1	SAMPLI	NG	1										
FOR LAB USE ONLY		AP.			T	T	Γ				T													
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	nd Damages. Cardinal's liability and client's exclusive remedy for ing those for negligence and any other cause whatsoever shall be Cardinal be liable for incidental or consequental damages, includin														cable									

atiliates or successors arising out of or related to the performance of	f services hereunder by Cardina	al, regardless of whether such clairs is based upon any of the above stated re-	Phone Result: Ves No Add' Phone #:
Dalinguished By:	Date: Re	eceived By:	Filolie Result. D Too a too a too
Relinquished By:	5-19-14		Fax Result: Yes No Add'I Fax #:
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Sampler - UPS - Bus - Other:	SI.	O Cool Intact (Initials)	
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+ Cardinal cannot accent verbal c	hanges Please fat	ax written changes to 595-393-2476	

#54





April 04, 2014

MICKEY HORN

PALADIN

4006 DUNKIRK

MIDLAND, TX 79707

RE: LOWE SWD #1 9 LOW 12 #1

Enclosed are the results of analyses for samples received by the laboratory on 03/31/14 13:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	03/31/2014	Sampling Date:	03/28/2014
Reported:	04/04/2014	Sampling Type:	Soil
Project Name:	LOWE SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: NORTHSIDE (H400950-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2014	ND	2.64	132	2.00	4.76	
Toluene*	<0.050	0.050	04/02/2014	ND	2.55	128	2.00	5.08	
Ethylbenzene*	<0.050	0.050	04/02/2014	ND	2.51	126	2.00	4.96	
Total Xylenes*	<0.150	0.150	04/02/2014	ND	7.31	122	6.00	5.65	
Total BTEX	<0.300	0.300	04/02/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	115 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	04/02/2014	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/02/2014	ND	187	93.4	200	1.94	
DRO >C10-C28	2260	10.0	04/02/2014	ND	216	108	200	2.56	
Surrogate: 1-Chlorooctane	109 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	147 9	63.6-15	4						

### Cardinal Laboratories

### \*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

# CARDINAL

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### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received: Reported: Project Name: Project Number:	03/31/2014 04/04/2014 LOWE SWD #1	Sampling Date: Sampling Type: Sampling Condition:	03/28/2014 Soil Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: SOUTHSIDE (H400950-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS			416 T		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2014	ND	2.64	132	2.00	4.76	
Toluene*	<0.050	0.050	04/02/2014	ND	2.55	128	2.00	5.08	
Ethylbenzene*	<0.050	0.050	04/02/2014	ND	2.51	126	2.00	4.96	
Total Xylenes*	<0.150	0.150	04/02/2014	ND	7.31	122	6.00	5.65	
Total BTEX	<0.300	0.300	04/02/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	113 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	04/02/2014	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/02/2014	ND	187	93.4	200	1.94	
DRO >C10-C28	2260	10.0	04/02/2014	ND	216	108	200	2.56	
Surrogate: 1-Chlorooctane	109 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	137 9	63.6-15	4						

### **Cardinal Laboratories**

### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This reproduced occept in full with written approval of Cardinal laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any dairn arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or correspondible data any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or correspondible data and exceptions, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Kere

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland. Hobbs, NM 88240

ANALYSIS REQUEST	P.O. #: P.O. #: Company: Palad: NEN ung Attn: M: Chey Hopp Address: City: M: Land State: Zip: Phone #: 432-le 34/Le 59 9 Phone #: 432-le 34/Le 59 9	# СОИТАІИЕRS       ФЕОИИДИМАТЕR     ФЕОИИДИМАТЕR       СВОИИДИМАТЕR     ВОІС       ОЛ     ОЛ       ОЛ     ОЛ       ОЛ     ВОІС       ОЛ     ОЛ       ОЛ     ОЛ       ОЛ     ОЛ       ОЛ     ОЛ       ОЛ     ОЛ       ОЛ     ОЛ	22 Sample Condition CHECKED BY:   22 Sample Condition CHECKED BY:
101 East Marianu, 10003, m. 501	Zip: P.O. #: P.O. #: Company: Palaol: Attn: M: Company: Palaol: Attn: M: Company: Palaol: Address: Address: City: M: Jacol State: Zip: Phone #: 432-Le344 Fax #:	ріє і. D. Карала Солтание Карала Солтание Карала Солт	Billy and clerifs actualise framedy for any claim artistion whether based in conduct or tax, theal the finited to the amount plate   8 any other cause whatlacever shall be deemed where under a whether plate and the whether based in conduct or tax, then the based or tax, then tax or posts after tax of tax or t
101 East Mark (575) 393-2326	Company Name: Poloo in Project Manager Micheury Address: City: Parks Michono Phone #: Project #: Project Name: Cow E S Project Location: Samoler Name:	San	PLEASE MOTE: Lublity and Damages. Cardinar's labelity a placest Mote: Lublity and Damages. Cardinar's labelity a manyress. At claims including those for regrigence and any services. In on event stails cardinal for fable for includental or settingent services and any sector and any services. In the cardinary is the sector of the setting the sector of the setting the sector of the setting the sector of the

2 + + 2





July 11, 2014

F

MICKEY HORN PALADIN

4006 DUNKIRK

MIDLAND, TX 79707

RE: LOWE 25 SWD

Enclosed are the results of analyses for samples received by the laboratory on 07/08/14 7:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Reported:07/11/2014Sampling Type:SoilProject Name:LOWE 25 SWDSampling Condition:** (See Notes)Project Number:NONE GIVENSample Received By:Jodi Henson	Received:	07/08/2014	Sampling Date:	07/07/2014
Project Number: NONE GIVEN Sample Received By: Jodi Henson	Reported:	07/11/2014	Sampling Type:	and the second se
Jour Herson	Project Name:	LOWE 25 SWD	Sampling Condition:	** (See Notes)
	Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location: NOT GIVEN	Project Location:	NOT GIVEN		

### Sample ID: SOUTHWEST TANK (H402055-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2014	ND	1.81	90.7	2.00	12.2	
Toluene*	<0.050	0.050	07/10/2014	ND	1.83	91.3	2.00	12.6	
Ethylbenzene*	<0.050	0.050	07/10/2014	ND	1.85	92.3	2.00	12.0	
Total Xylenes*	<0.150	0.150	07/10/2014	ND	5.73	95.6	6.00	11.0	
Total BTEX	<0.300	0.300	07/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/10/2014	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/09/2014	ND	191	95.3	200	0.0204	
DRO >C10-C28	<10.0	10.0	07/09/2014	ND	205	102	200	0.0322	
Surrogate: 1-Chlorooctane	125 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	147 %	63.6-15	4						

### **Cardinal Laboratories**

### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and dient's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by dient for analyses. All daims, induding those for negligence and any other cause whatsoever shall be limited to the amount paid by dient for analyses. All daims, induding those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidential or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by dient, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4









3-4-2014 DEPth 2' good Test NEAR pumping UNIT



March 11, 2014

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MICKEY HORN PALADIN

4006 DUNKIRK

MIDLAND, TX 79707

RE: LOWE 25 SWD + LOWK #1

Enclosed are the results of analyses for samples received by the laboratory on 03/04/14 9:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

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Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager

Page 1 of 6



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### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	03/04/2014	Sampling Date:	03/03/2014
Reported:	03/11/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD 525-135-3715	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN 990F52 SOFWL	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: NORTHSIDE 2' (H400643-01)

BTEX 8260B	mg/kg		Analyzed By: MS								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Benzene*	< 0.050	0.050	03/10/2014	ND	1.92	95.9	2.00	1.04			
Toluene*	<0.050	0.050	03/10/2014	ND	1.91	95.7	2.00	4.25			
Ethylbenzene*	<0.050	0.050	03/10/2014	ND	1.83	91.6	2.00	4.77			
Total Xylenes*	<0.150	0.150	03/10/2014	ND	5.57	92.8	6.00	5.04			
Total BTEX	<0.300	0.300	03/10/2014	ND							
Surrogate: Dibromofluoromethane	97.1	% 61.3-14	2								
Surrogate: Toluene-d8	104	% 71.3-12	9								
Surrogate: 4-Bromofluorobenzene	110	65.7-14	1								
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	1880	16.0	03/07/2014	ND	416	104	400	3.92			
TPH 8015M	mg/	kg	Analyze	d By: ms					1.04 4.25 4.77 5.04 RPD Qualifier		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	03/06/2014	ND	208	104	200	5.02			
DRO >C10-C28	3830	10.0	03/06/2014	ND	209	105	200	3.45			
Surrogate: 1-Chlorooctane	96.7	% 65.2-14	0								
Surrogate: 1-Chlorooctadecane	160 9	63.6-15	4								

### **Cardinal Laboratories**

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Celey D. Kere

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	03/04/2014	Sampling Date:	03/03/2014
Reported:	03/11/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SOUTHSIDE 2' (H400643-02)

BTEX 8260B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2014	ND	1.92	95.9	2.00	1.04	
Toluene*	<0.050	0.050	03/10/2014	ND	1.91	95.7	2.00	4.25	
Ethylbenzene*	<0.050	0.050	03/10/2014	ND	1.83	91.6	2.00	4.77	
Total Xylenes*	<0.150	0.150	03/10/2014	ND	5.57	92.8	6.00	5.04	
Total BTEX	<0.300	0.300	03/10/2014	ND					
Surrogate: Dibromofluoromethane	95.9	% 61.3-14	2						
Surrogate: Toluene-d8	102	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	104	65.7-14	1						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	03/07/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/06/2014	ND	208	104	200	5.02	
DRO >C10-C28	76.4	10.0	03/06/2014	ND	209	105	200	3.45	
Surrogate: 1-Chlorooctane	88.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.8	% 63.6-15	4						

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	03/04/2014	Sampling Date:	03/03/2014
Reported:	03/11/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: HOLE BY PUMPING UNIT @ 2' (H400643-03)

BTEX 8260B	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2014	ND	1.92	95.9	2.00	1.04	
Toluene*	<0.050	0.050	03/10/2014	ND	1.91	95.7	2.00	4.25	
Ethylbenzene*	<0.050	0.050	03/10/2014	ND	1.83	91.6	2.00	4.77	
Total Xylenes*	<0.150	0.150	03/10/2014	ND	5.57	92.8	6.00	5.04	
Total BTEX	<0.300	0.300	03/10/2014	ND					
Surrogate: Dibromofluoromethane	95.6	% 61.3-14	2						
Surrogate: Toluene-d8	102	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	100	65.7-14	1						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/07/2014	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/06/2014	ND	208	104	200	5.02	
DRO >C10-C28	38.1	10.0	03/06/2014	ND	209	105	200	3.45	
Surrogate: 1-Chlorooctane	91.6	% 65.2-14	0						

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### \*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 6



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	101 East Marland, Hobbs, NM 88 (575) 393-2326 FAX (575) 393-247																							
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January 14, 2014

MICKEY HORN PALADIN

4006 DUNKIRK

MIDLAND, TX 79707

RE: LOWE 25 SWD

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 15:20.

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Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager

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### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	01/09/2014	Sampling Date:	01/08/2014
Reported:	01/14/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: SURFACE (H400081-01)

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BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	01/13/2014	ND	2.09	105	2.00	3.68	
Toluene*	9.75	5.00	01/13/2014	ND	2.06	103	2.00	3.76	
Ethylbenzene*	10.6	5.00	01/13/2014	ND	2.10	105	2.00	3.52	
Total Xylenes*	87.5	15.0	01/13/2014	ND	6.12	102	6.00	3.11	
Total BTEX	108	30.0	01/13/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 118 % 89.4-126

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	ride <b>16.0</b> 16.0		01/10/2014	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	4110	100	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	57500	100	01/12/2014	ND	170	84.8	200	13.1	
Surrogate: 1-Chlorooctane	471	65.2-14	0						
Surrogate: 1-Chlorooctadecane 1550 9		% 63.6-15	4						

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### \*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of

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February 10, 2014

MICKEY HORN PALADIN 4006 DUNKIRK MIDLAND, TX 79707

BAd

RE: LOWE 25 SWD

Enclosed are the results of analyses for samples received by the laboratory on 02/03/14 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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### Analytical Results For:

PALADIN		
MICKEY H	ORN	
4006 DUN	KIRK	
MIDLAND	TX, 79707	
Fax To:	(432) 634-6599	

Received:	02/03/2014	Sampling Date:	01/31/2014
Reported:	02/10/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: 1' NORTH SIDE (H400321-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/06/2014	ND	2.42	121	2.00	1.65	
Toluene*	<0.500	0.500	02/06/2014	ND	2.37	119	2.00	1.64	
Ethylbenzene*	1.34	0.500	02/06/2014	ND	2.38	119	2.00	1.10	
Total Xylenes*	15.8	1.50	02/06/2014	ND	6.89	115	6.00	0.798	
Total BTEX	17.2	3.00	02/06/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 187 % 89.4-126

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	TNue Value QC	RPD	Qualifier	
Chloride	384	16.0	02/07/2014	ND	416	104	400	3.92		
TPH 8015M	mg/	kg	Analyze	d By: ms					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	617	100	02/04/2014	ND	203	101	200	3.08		
DRO >C10-C28	9560	100	02/04/2014	ND	190	95.1	200	1.59		
Surrogate: 1-Chlorooctane	e: 1-Chlorooctane 168 %		0							
Surrogate: 1-Chlorooctadecane		63.6-15	4							

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

PALADIN MICKEY HORN 4006 DUNKIRK MIDLAND TX, 79707 Fax To: (432) 634-6599

Received:	02/03/2014	Sampling Date:	01/31/2014
Reported:	02/10/2014	Sampling Type:	Soil
Project Name:	LOWE 25 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: 1' SOUTH SIDE (H400321-02)

BTEX 8021B	mg,	/kg	Analyze	d By: MS			•		S-04
Analyte	Result	Reporting Limit	Analyzed Method Blank BS		% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	02/06/2014	ND	2.25	113	2.00	1.30	
Toluene*	<0.500	0.500	02/06/2014	ND	2.20	110	2.00	1.10	
Ethylbenzene*	0.905	0.500	02/06/2014	ND	2.18	109	2.00	0.773	
Total Xylenes*	8.50	1.50	02/06/2014	ND	6.32	105	6.00	0.682	
Total BTEX	9.41	3.00	02/06/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 142 % 89.4-126

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/07/2014	ND	416 104		400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	599	100	02/04/2014	ND	203	101	200	3.08	
DRO >C10-C28	9200	100	02/04/2014	ND	190	95.1	200	1.59	
Surrogate: 1-Chlorooctane	162	65.2-14	0						
Surrogate: 1-Chlorooctadecane	urrogate: 1-Chlorooctadecane 238 %		4				•		

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Kune

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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	(575) 393-2326 FAX																								
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